CLAIMS

What is claimed is:

1. A method for detecting a network cable disconnection, said method comprising:

detecting a change of connection state of a connector using a sensor that resides in said connector;

generating connection state information from information supplied by said sensor; and

communicating said connection state information to a connection state monitoring utility.

2. The method as described in Claim 1, wherein said connector is a cable plug.

3. The method as described in Claim 1, wherein said connector is a socket.

4. The method of Claim 1, wherein said sensor includes a switch selected from the group that includes mechanical, electrical, resistive, optical and capacitive switches.

5. The method of Claim 1, wherein said connector further comprises a processor and a memory.

6. The method of Claim 5, wherein said communicating uses a communication protocol selected from the group that includes IPv6 (Internet Protocol Version 6), TCP (Transmission Control Protocol), finger, and SNMP (Simple Network Management Protocol).

7. The method of Claim 2, wherein said cable plug is attached to an endpoint of said network cable.

8. The method of Claim 5, wherein said connector receives a communication that interrogates said sensor regarding the connection state of said connector.

9. The method of Claim 1, wherein said connection state information is transmitted wirelessly to said connection state monitoring utility.

10. The method of Claim 1, wherein a unique identification is mapped to said connector.

11. The method of Claim 10, further comprising communicating said unique identification with said connection state information.

12. The method of Claim 1, further comprising detecting, generating

and communicating information related to power status, fuse status, carrier signal status and temperature.

13. The method of Claim 1, wherein electrical power for detecting said network cable disconnection is obtained from the network.

14. A method for detecting a network cable connection state, said method comprising:

detecting a state change of a cable connector using a contact sensor that resides in said cable connector;

generating connection state information from information supplied by said contact sensor;

receiving an interrogation signal from a connection state monitoring utility; and

communicating said connection state information to said connection monitoring utility using a network communication protocol.

15. The method of Claim 14, wherein said sensor includes a switch selected from the group that includes mechanical, electrical, resistive, optical and capacitive.

16. The method of Claim 14, wherein said cable connector comprises an embedded processor and memory.

17. The method of Claim 14, wherein said communication protocol uses a communication protocol selected from the group that includes IPv6, TCP, finger, and SNMP.

18. The method of Claim 17, wherein a cable plug is attached to an endpoint of said network cable.

19. The method of Claim 14, wherein said connection state information is transmitted wirelessly.

20. The method of Claim 16, wherein a unique identification is mapped to said memory of said cable connector.

21. The method of Claim 14, further comprising reading the time that said cable connector disconnected.

22. The method of Claim 14, further comprising detecting, generating and communicating information related to power status, fuse status, carrier signal status and temperature.

23. The method of Claim 14, wherein electrical power for detecting said network cable connection state is obtained from the network.

24. A cable connector comprising:

a sensor that senses a connection state of the connector and state change signal; and

a processor coupled to said sensor for executing the transmission of said connection state information over a communication network to indicate a connection state of said cable connector.

25. The connector of Claim 24, wherein said cable connector further comprises a memory coupled to said processor.

26. The connector of Claim 24, wherein said communication network communicates using a protocol selected from the group that includes IPv6, TCP, finger and SNMP.

27. The connector of Claim 24, wherein said sensor is a contact sensor.

28. The connector of Claim 24, wherein said processor operates in response to an interrogation signal to ascertain connection state information.

29. The connector of Claim 24, wherein said processor operates in response to said connection state change signal.

30. The connector of Claim 24, wherein said connection state information is transmitted wirelessly.

31. The connector of Claim 24, wherein said sensor is selected from the group that includes mechanical, electrical, resistive, optical, and capacitive.

32. The connector of Claim 24, wherein said cable connector comprises an RJ45 twisted pair connector.

33. The connector of Claim 25, wherein a unique connector identification is mapped to said memory.

34. The connector of Claim 25, wherein said memory records the time that a cable connector change in state occurs.

35. The connector as described in Claim 24, wherein said cable connector is a plug.

36. The connector as described in Claim 24, wherein said cable connector is a cable socket.

37. The connector as described in Claim 24, wherein said cable connector is a power connector.

38. The connector of Claim 26, wherein said cable connector detects, generates and communicates information related to power status, fuse status, carrier signal status and temperature.

39. The connector of Claim 26, wherein electrical power for detecting said network cable connection state is obtained from the network.